Air Quality Permitting
Statement of Basis

November 1, 2007

Tier II Operating Permit and Permit to Construct
No. T2-2007.0116

North American Foods, LLC, Idaho Falls
(Formerly Idaho Fresh-Pak, Inc.)

Facility ID No. 019-00038

Prepared by:

Robert Baldwin, Permit Writer
Air Quality Division

PROPOSED FOR PUBLIC COMMENT

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Acronyms, Units, and Chemical Nomenclature

AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
cfm	cubic feet per minute
CAM	Compliance Assurance Monitoring
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
HAPs	Hazardous Air Pollutants
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
m	meter(s)
m/sec	meters per second
MACT	Maximum Available Control Technology
MMBtu	Million British thermal units
NAAQS	National Ambient Air Quality Standards
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O_3	ozone
PM	Particulate Matter
PM_{10}	Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	Permit to Construct
PTE	Potential to Emit
Rules	Rules for the Control of Air Pollution in Idaho
SM	synthetic minor
SO_2	sulfur dioxide
TAP	Toxic Air Pollutant
T/yr	Tons per year
$\mu g/m^3$	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01 Sections 201 and 404.04, Rules for the Control of Air Pollution in Idaho (Rules) for Tier II operating permits and Permits to Construct.

2. FACILITY DESCRIPTION

North American Foods, LLC (formerly Idaho Fresh Pak, Inc.) is a potato processing company that dehydrates potatoes to make flakes, slices, and dices. The process includes dryers and dehydration lines, which are sources of particulate matter emissions.

Trucks deliver potatoes to the plant. The potatoes are unloaded into storage, with much of the rock and silt removed prior to storage. Potatoes are taken from the storage cellars for the process using cold water to transport and wash the potatoes. The potatoes enter a steam peeler, where they are exposed to steam for a brief period of time. This loosens the peeling prior to the brush peeling/washing stage. The steam is exhausted and quenched in a water bath. The peel is fully removed by dry and wet scrubbing using revolving brushes. The potatoes are sorted and transported to the flake lines or the belt dryer lines.

In the flake lines, the potatoes are sent to a pre-cooker, which blanch the material. This operation conditions the starch cells. Potatoes are then cooled and water-transported into cookers where they are exposed to steam to fully cook the potato. The potatoes are riced, forced through slots and broken into small pieces like mash, and conveyed to three steam-heated drum dryers. Each drum dryer has its own exhaust stack.

The riced potatoes are spread across the face of the drum dryers with an applicator roll. The steam heated drum dryers rotate and drive the moisture from the potato cells. The removed moisture is exhausted through the drum dryer stacks; these stacks are also referred to as flaker stacks..

The dried potato sheet is cut off the drum and broken into smaller pieces called flake. Good flake goes to mills where it is cut into desired particle size and density and air-transported to product separation cyclones called vaculifts. The vaculift units are driven by electrical fans to move dehydrated product, and they are used to control product dust during packaging. The flake is bagged and palletized to be sent for distribution or storage.

Correctly sized potatoes may also be pumped to the belt drying operations where they are sliced or diced and then blanched. After blanching, the potato pieces are distributed across a large belt conveyor and conveyed through the steam-heated oven (typically referred to by the brand name “Proctor”) for dehydration. The moisture driven from the potato is exhausted to the atmosphere.

The slices and dices are sorted into separate packaging lines. The finished potato product is bagged and shipped to a warehouse, customers, or other plants.

3. FACILITY / AREA CLASSIFICATION

North American Foods, LLC is defined as a synthetic minor facility because without permit limits on fuel oil usage, the potential to emit of SO_2 emissions would exceed 100 tons per year. The AIRS classification is “SM” because the potential to emit of SO_2 is limited to less than major source levels.

The facility is located within AQCR 61 and UTM zone 12. The facility is located in Bonneville County, which is designated as attainment for PM_{10} and unclassifiable for all other criteria pollutants (CO, NO_X, SO_2, lead, and ozone).

The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at North American Foods, LLC. This required information is entered into the EPA AIRS database.

4. APPLICATION SCOPE

DEQ issued Idaho Fresh Pak, Inc. (now North American Foods, LLC) a Consent Order on December 24, 2002 (copy in Appendix D) directing Idaho Fresh Pak to submit a Tier II operating permit application addressing a number of emission units constructed without a Permit to Construct. The first Tier II operating permit application was received on June 30, 2003 and was later withdrawn. The second Tier II application was received on June 29, 2007.

4.1 Application Chronology

June 29, 2007	DEQ received the second facility-wide Tier II operating permit application.
July 27, 2007	DEQ determined the Tier II application complete.
August 9, 2007	DEQ received notice of the facility name change.
October 31, 2007	DEQ sent draft Tier II/PTC to Idaho Falls regional office for review.
November 30, 2007	DEQ sent draft Tier II/PTC to facility for review.

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this Tier II and PTC.

5.1 Equipment Listing

- Air Makeup Unit – Bag Room, 5 MM Btu/hr Natural Gas-Fired, Constructed 1971
- Air Makeup Unit – Flaker Room, 2.5 MM Btu/hr Natural Gas-Fire, Constructed 1971
- Air Makeup Unit – Waste Plant, 2.5 MM Btu/hr Natural Gas-Fired, Constructed 1971
- Bin Dryer #1 – Manufactured by King, 2.5 MM Btu/hr Natural Gas-Fired, Constructed 1971
- Bin Dryer #2 – Manufacturer Unknown, 3.8 MM Btu/hr Natural Gas-Fired, Constructed 1971
- Bag Room Vaculift – Manufactured by Vaculift, Capacity 550 cfm, Constructed 1995
- Canline Vaculift – Manufactured by Vaculift, Capacity 450 cfm, Constructed 2002
- Flaker Line #1 – Manufactured by Blaw-Knox, Constructed 1974
- Flaker Line #2 – Manufactured by Blaw-Knox, Constructed 1974
- Flaker Line #3 – Manufactured by Idaho Steel, Constructed 2001
- Flaker Lines #1 and #2 Vaculift, Manufactured by Vaculift, Capacity 1140 cfm, Constructed 1981
- Flaker Line #3 Vaculift, Manufactured by Vaculift, Capacity 990 cfm Constructed 1995
- Proctor Belt Dryer #1, Manufactured by Proctor and Schwartz, Constructed 1965
- Proctor Belt Dryer #2, Manufactured by Proctor and Schwartz, Constructed 1965
- Proctor Belt Dryer #3, Manufactured by Proctor and Schwartz, Constructed 1965
- Boiler No.1, Cleaver Brooks, Model WT200x-CN5, 61.6 MM Btu/hr Natural Gas-Fired, Distillate-Fired, Constructed 1974, installed 1981
- Boiler No.2, Cleaver Brooks, Model L34, 26.7 MM Btu/hr, Natural Gas-Fired only, Constructed 1974
- Storage Tank – 200,000 gallon capacity, Constructed 1974
- Storage Tank – 14,400 gallon capacity, Constructed 1981

5.2 Emissions Inventory

Table 5.1 EMISSIONS ESTIMATES OF CRITERIA POLLUTANTS

Emissions Unit	PM_{10}		SO_2		NOx		CO		VOC	
	Lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler No. 1	5.1	22.3	31.9	93.9	13.5	52.9	10.3	45.3	0.3	1.5
Boiler No. 2	0.4	1.8	0..02	0.1	4.0	17.5	4.5	19.6	0.15	0.6
Bin Dryers (2)	0.1	0.42	0.004	0.02	0.95	4.14	1.06	4.64	0.03	0.15
Dryer, Proctor and Schwartz, belt type; combined emissions dryers Nos. 1-3	2.48	10.81								
Dryer, Flaker/Drum type, Nos. 1-3	5.88	25.8								
Air Makeup Units (3)	0.2	0.67	0.007	0.03	1.51	6.57	1.68	7.36	0.05	0.24
Bag Room Vaculift, Canline Vaculift,	0.08	0.35								
Flaker Line 1 & 2 Vaculift	0.17	0.73								
Flaker Line 3 Vaculift	0.14	0.63								
Totals	14.55	64.51	31.92	94.05	19.96	81.11	17.54	76.9	0.53	2.49

Table 5.2 HAP EMISSIONS SUMMARY

HAPS	Annual PTE
	T/yr
Benzene	1.24E-3
Formaldehyde	1.01E-1

A detailed emissions inventory is located in Appendix B.

5.3 Modeling

The facility has demonstrated compliance to DEQ's satisfaction that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard**.** A full summary of the modeling analysis can be found in the modeling memorandum in Appendix C.

Table 5.3 RESULTS FOR FULL IMPACT ANALYSES

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu g/m^3$)[a]	Background Concentration ($\mu g/m^3$)	Total Ambient Impact ($\mu g/m^3$)	NAAQS[b] ($\mu g/m^3$)	Percent of NAAQS
PM_{10}[c]	24-hour[d]	49 54[e] (48.0) (51.6[f])(56.6[g])	73	122 127[e] (121.0) (124.6[f])(129.6[g])	150	<86
	Annual	12 15[e]	26	38 41[e]	50	<82
Carbon monoxide (CO)	1-hour	901	3,600	4,501	40,000	11
	8-hour	194	2,300	2,494	10,000	25
Sulfur dioxide (SO_2)	3-hour	484	34	518	1,300[k]	40
	24-hour	81	26	107	365[k]	29
	Annual	15	8	23	80[g]	29
Nitrogen dioxide (NO_2)	Annual	13	17	30	100[g]	30

[a]Micrograms per cubic meter. Vales in parentheses are those generated through DEQ verification analyses
[b]National ambient air quality standards
[c]Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
[d]Modeled design values are the maximum 6th highest modeled value from a 5-year meteorological data set
[e]Result obtained using corrected flows for FLAKE1, FLAKE2, and FLAKE3
[f]Total emissions from PROCT_1, PROCT_2, and PROCT_3 modeled from PROCT_1, and total emissions from FLAKE1, FLAKE2, and FLAKE3 modeled from FLAKE3
[g]Emissions modeled as described in footnote "e," but flows from FLAKE3 were modeled at a corrected rate of 12.2 m/sec

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this Tier II operating permit and PTC.

IDAPA 58.01.01.201.....Permit to Construct Required

The facility's Consent Order of December 24, 2002 specifically states a PTC is required.

IDAPA 58.01.01.203.....Permit Requirements for New and Modified Stationary Sources

The applicant has shown to the satisfaction of DEQ that the facility will comply with all applicable emissions standards, ambient air quality standards, and toxic increments.

IDAPA 58.01.01.210.....Demonstration of Preconstruction Compliance with Toxic Standards

The applicant has demonstrated compliance for all TAPs identified in the permit application. The applicant has demonstrated that the air toxic pollutants are below their applicable screening levels.

IDAPA 58.01.01.400.....Tier II Operating Permit Required

The facility's Consent Order of December 24, 2002 specifically states a Tier II operating permit is required.

5.4.1 Attainment Designation (40 CFR 81.313)

The facility is located in Bonneville County which is designated as attainment or unclassifiable for PM_{10}, $PM_{2.5}$, CO, NO_2, SO_X, and Ozone. Reference 40 CFR 81.313.

5.4.2 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

The facility is not a classified Title V facility.

5.4.3 NSPS Applicability (40 CFR 60)

The facility's 200,000 gallon storage tank was constructed in 1974 and is subject to 40 CFR 60.110.c (2) and 40 CFR 60.113.d (1). The storage tank shall store distillate fuel oil only. Since only distillate fuel oil shall be stored in the 200,000 gallon storage tank, the facility is not required to maintain any other monitoring records.

5.4.4 NESHAP Applicability (40 CFR 61)

This facility is not subject to 40 CFR Part 61.

5.4.5 MACT Applicability (40 CFR 63)

This facility is not subject to 40 CFR Part 63.

5.4.6 CAM Applicability (40 CFR 64)

This facility is not subject to 40 CFR Part 64.

5.5 Fee Review

North American Foods, LLC submitted the application fee of $1,000 with the application on May 3, 2007.

The Tier II operating permit processing fee is calculated by the Department pursuant to the categories provided in IDAPA 58.01.01.407. The fee calculation shall not include fugitive emissions. The fee for synthetic minor stationary sources with permitted emissions below a major threshold level is $10,000. A Tier II operating permit processing fee shall be payable upon receipt of an assessment sent, along with the final permit to the person receiving the permit by the Department.

Table 5.4 TIER II PROCESSING FEE SUMMARY

Emissions Inventory	
Pollutant	**Permitted Emissions**
NO_X	81.11
SO_2	94.05
CO	76.9
PM_{10}	64.68
VOC	2.49
TAPS/HAPS	0.0
Total:	319.23
Fee Due	**$ 10,000.00**

6. PERMIT CONDITIONS

This permit establishes conditions for the emission units at North American Foods, LLC plant in Idaho Falls. These are new permit conditions resulting from the requirements in the December 24, 2002 Consent Order issued to Idaho Fresh-Pak (presently, North American Foods, LLC).

6.1 Permit Conditions 3.1 and 3.2 in the Tier II/PTC contain information regarding the process description and the emissions control.

6.2 Permit Condition 3.3 contains the emissions limit for criteria pollutants for the two boilers. The emissions were determined by the higher pollutant's emission for the fuel combusted. Boiler #2 is fired on natural gas only. Boiler #1 is permitted to combust natural gas and 2,640,000 gallons of distillate fuel annually. Compliance with condition 3.3 is determined through Permit Conditions 3.7, 3.8, and 3.11.

6.3 Permit Condition 3.4 provides the standard that fuel burning equipment must meet while burning natural gas.

6.4 Permit Condition 3.5 provides the standard that fuel burning equipment must meet while burning liquid fuel.

6.5 Permit Condition 3.6 provides the standard visible emission from the boiler when operating. Compliance with Permit Condition 3.6 is determined through the observations required by Permit Condition 2.7, 2.8, and 3.9.

6.6 Permit Condition 3.11 shall be used to demonstrate compliance with Permit Condition 3.3 for sulfur emissions.

6.7 Permit Condition 4.1 provides a description of the process emission units, the controls (if any), and the points of emissions.

6.8 Permit Condition 4.2 provides the daily emission limits for PM_{10} from each group of similiarly functioning processes. The small natural gas fired units, Proctor belt dryers, flaker dryers and vaculifts were grouped by similar functions. The throughput for the combined Proctor belt dryers is 54,000 pounds of output per calendar day. The throughput for the combined flaker drum dryers is 93,600 pounds per calendar day. Compliance with Permit Condition 4.2 shall be determined through Permit Conditions 4.6, 4.7, and 4.8. Natural gas emissions for the small gas fire units were calculated at the maximum potential to emit.

6.9 Permit Condition 4.3 provides the daily product throughput for the combined three flaker drum dryers, and the combined three Proctor belt dryers. Compliance with Permit condition 4.3 shall be determined with the monitoring, recording, and testing requirements of Permit Conditions 4.6, 4.7, and 4.8.

6.10 Permit Condition 4.4 requires that operation and maintenance specifications of the vaculifts be stated within in the manufacturer's or the O&M manual. Compliance with Permit Condition 4.4 shall be demonstrated with Permit Condition 4.9 which requires the development of an O&M manual and specifies at a minimum some of the specific information to be within the O&M manual.

7. PERMIT REVIEW

7.1 Regional Review of Draft Permit

A draft of the TierII/PTC permit was sent to the Idaho Falls Regional Office on October 31, 2007, for review. No comments were received.

7.2 Facility Review of Draft Permit

A draft of the TierII/PTC permit was sent to the facility on November 30, 2007, for review. Comments were received on December 19, 2007. Responses to the comments were addressed with some changes in the permit.

7.3 Public Comment

An opportunity for a public comment period on the proposed Tier II/PTC operating permit will be provided in accordance with IDAPA 58.01.01.404.

REB/hp Permit No. T2-2007.0116

APPENDIX A – AIRS Information

AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM

Facility Name: North American Foods, LLC
Facility Location: 6140 W River Rd., Idaho Falls
AIRS Number: 019-00038

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO_2	SM							U
NO_x	B							U
CO	B							U
PM_{10}	B							U
PT (Particulate)	B							U
VOC	B							U
THAP (Total HAPs)	B							U
			APPLICABLE SUBPART					
			K					

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)
[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, **or** each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

APPENDIX B – Emissions Inventory

LIST OF EMISSION UNITS FACILITY-WIDE

North American Foods, LLC; Idaho Falls
Emission Limits[a] – Hourly (lb/hr), and Annual[b] (T/yr)

Source Description	Hourly PM_{10}[c] Emissions (lb/hr)	Annual PM_{10}[c] Emissions (T/yr)	SO_2		NO_x		VOC		CO	
			lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler No. 1	5.1	22.3	31.9	93.9	13.5	52.9	0.3	1.5	10.3	45.3
Boiler No. 2	0.8	3.6	0..02	0.1	4.0	17.5	0.15	0.6	4.5	19.6
Bin Dryers (2)	0.1	0.42	0.004	0.02	0.95	4.14	0.03	0.15	1.06	4.64
Dryer, Proctor and Schwartz, belt type; combined emissions dryers Nos. 1-3	2.49	10.81								
Dryer, Flaker/Drum type, Nos. 1-3	5.88	25.8								
Air Makeup Units (3)	0.2	0.67	0.007	0.03	1.51	6.57	0.05	0.24	1.68	7.36
Bag Room Vaculift, Canline Vaculift,	0.08	0.35								
Flaker Line 1 & 2 Vaculift	0.17	0.73								
Flaker Line 3 Vaculift	0.14	0.63								
Total	14.55	64.51	31.92	94.05	19.96	81.11	0.53	2.49	17.54	76.9

[a]As determined by a pollutant-specific EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

[b] As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

Potential Pollutant Emissions					
Permitted Toxic Emissions					
	Permitted Fuel Oil Potential Emissions				
	Gal.	#/1000gal		lb/yr	T/yr
Benzene	2640000	0.000214	1000	0.56496	0.000282
Ethylbenzene	2640000	0.0000636	1000	0.167904	8.4E-05
Formaldehyde	2640000	0.033	1000	87.12	0.04356
Naphthalene	2640000	0.00113	1000	2.9832	0.001492
1,1,1-Tricholroethane	2640000	0.000236	1000	0.62304	0.000312
Toluene	2640000	0.0062	1000	16.368	0.008184
o-xylene	2640000	0.000109	1000	0.28776	0.000144
Worst Case for fuel oil combusted at 8760 hours per year for Boiler #1					
	Max. Gal.	#/100 gal	% Sulfur	#/yr	T/yr
NOx	3938496	20		78769.9	39.4
SO2	3938496	142	0.5	279633.2	139.8
CO	3938496	5		19692.5	9.8
PM10	3938496	3.3		12997.0	6.5
VOC	3938496	0.252		992.5	0.5
If unpermitted Boiler #1 would exceed 100 tons per year of SO2					
	Worst Case = Total NG based on Boiler emissions				
	Maximum gas usage times the Boiler emission factors				
	Btu (10)6		# / (10)6 scf	# / yr	T / yr
NOx	104.6	8760	100	91629.6	45.8148
SO2	104.6	8760	0.6	549.7776	0.274889
CO	104.6	8760	84	76968.864	38.48443
PM10	104.6	8760	13.6	12461.626	6.230813
VOC	104.6	8760	5.5	5039.628	2.519814
Benzene	104.6	8760	0.0021	1.9242216	0.000962
Formaldehyde	104.6	8760	0.072	65.973312	0.032987
Toluene	104.6	8760	0.0034	3.1154064	0.001558

APPENDIX C – Modeling Review

M E M O R A N D U M

DATE: September 20, 2007

TO: Bob Baldwin, Air Quality Permit Writer, Air Program

FROM: Kevin Schilling, Stationary Source Modeling Coordinator, Air Program

PROJECT NUMBER: P-2007.0116

SUBJECT: Modeling Review for the North American Foods Tier II Operating Permit Renewal Application for their dehydrated potato production facility in Idaho Falls, Idaho

1.0 Summary

North American Foods submitted a Tier II Operating Permit and Permit to Construct application for their dehydrated potato production facility located in Idaho Falls, Idaho. Air quality analyses involving atmospheric dispersion modeling of emissions associated with operations of the facility were submitted to demonstrate that the modification would not cause or significantly contribute to a violation of any ambient air quality standard (IDAPA 58.01.01.203.02 [Idaho Air Rules Section 203.02]). Geomatrix Consultants, Inc. (Geomatrix), North American Food's consultant, conducted the submitted ambient air quality analyses.

A technical review of the submitted air quality analyses was conducted by DEQ. DEQ staff also conducted independent analyses to assess alternate operational scenarios and varying flow rates of several sources. The submitted modeling analyses in combination with DEQ's analyses: 1) utilized appropriate methods and models; 2) was conducted using reasonably accurate or conservative model parameters and input data; 3) adhered to established DEQ guidelines for new source review dispersion modeling; 4) showed either a) that predicted pollutant concentrations from emissions associated with the proposed facility were below significant contribution levels (SCLs) or other applicable regulatory thresholds; or b) that predicted pollutant concentrations from emissions associated with the facility, when appropriately combined with background concentrations, were below applicable air quality standards at all receptor locations. Table 1 presents key assumptions and results that should be considered in the development of the permit.

Table 1. KEY ASSUMPTIONS USED IN MODELING ANALYSES

Criteria/Assumption/Result	Explanation/Consideration
DEQ supplemental analyses demonstrated potential emissions from proctors and flakers could occur from a single stack (one for proctors and one for flakers) and still meet applicable air quality standards.	Stack-specific emissions limits or throughput restrictions are not necessary to assure compliance with air quality standards.

2.0 Background Information

2.1 Applicable Air Quality Impact Limits and Modeling Requirements

This section identifies applicable ambient air quality limits and analyses used to demonstrate compliance.

2.1.1 Area Classification

The North American Foods facility is located in Idaho Falls, Idaho. The area is designated as attainment or unclassifiable for all criteria pollutants.

2.1.2 Significant and Full NAAQS Impact Analyses

If estimated maximum pollutant impacts to ambient air from the emissions sources associated with the proposed facility exceed the significant contribution levels (SCLs) of Idaho Air Rules Section 90, then a full impact analysis is necessary to demonstrate compliance with National Ambient Air Quality Standards (NAAQS) and Idaho Air Rules Section 203.02. A full NAAQS impact analysis for attainment area pollutants involves adding ambient impacts from facility-wide emissions, and emissions from any nearby co-contributing sources, to DEQ-approved background concentration values that are appropriate for the criteria pollutant/averaging-time at the facility location and the area of significant impact. The resulting maximum pollutant concentrations in ambient air are then compared to the NAAQS listed in Table 2. Table 2 also lists SCLs and specifies the modeled value that must be used for comparison to the NAAQS.

Table 2. APPLICABLE REGULATORY LIMITS

Pollutant	Averaging Period	Significant Contribution Levels[a] ($\mu g/m^3$)[b]	Regulatory Limit[c] ($\mu g/m^3$)	Modeled Value Used[d]
PM_{10}[e]	Annual[f]	1.0	50[g]	Maximum 1st highest[h]
	24-hour	5.0	150[i]	Maximum 6th highest[j]
$PM_{2.5}$	Annual	Not established	15	Use PM_{10} as surrogate
	24-hour	Not established	35	Use PM_{10} as surrogate
Carbon monoxide (CO)	8-hour	500	10,000[k]	Maximum 2nd highest[h]
	1-hour	2,000	40,000[k]	Maximum 2nd highest[h]
Sulfur Dioxide (SO_2)	Annual	1.0	80[g]	Maximum 1st highest[h]
	24-hour	5	365[k]	Maximum 2nd highest[h]
	3-hour	25	1,300[k]	Maximum 2nd highest[h]
Nitrogen Dioxide (NO_2)	Annual	1.0	100[g]	Maximum 1st highest[h]
Lead (Pb)	Quarterly	NA	1.5[i]	Maximum 1st highest[h]

[a]Idaho Air Rules Section 006.90
[b]Micrograms per cubic meter
[c]Idaho Air Rules Section 577 for criteria pollutants
[d]The maximum 1st highest modeled value is always used for significant impact analyses
[e]Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers
[f]The annual PM_{10} standard was revoked in 2006. The standard is still listed because compliance with the annual $PM_{2.5}$ standard is demonstrated by a PM_{10} analysis that demonstrates compliance with the revoked PM_{10} standard.
[g]Never expected to be exceeded in any calendar year
[h]Concentration at any modeled receptor
[i]Never expected to be exceeded more than once in any calendar year
[j]Concentration at any modeled receptor when using five years of meteorological data
[k]Not to be exceeded more than once per year

New source review requirements for assuring compliance with $PM_{2.5}$ standards have not yet been developed. EPA has asserted through a policy memorandum that compliance with $PM_{2.5}$ standards will be assured through an air quality analysis for the corresponding PM_{10} standard. Although the PM_{10} annual standard was revoked in 2006, compliance with the revoked PM_{10} annual standard must be demonstrated as a surrogate to the annual $PM_{2.5}$ standard.

2.1.3 Toxic Air Pollutant Analyses

Emissions of toxic substances are generally addressed by Idaho Air Rules Section 161:

Any contaminant which is by its nature toxic to human or animal life or vegetation shall not be emitted in such quantities or concentrations as to alone, or in combination with other contaminants, injure or unreasonably affect human or animal life or vegetation.

Permit requirements for toxic air pollutants from new or modified sources are specifically addressed by Idaho Air Rules Section 203.03 and require the applicant to demonstrate to the satisfaction of DEQ the following:

Using the methods provided in Section 210, the emissions of toxic air pollutants from the stationary source or modification would not injure or unreasonably affect human or animal life or vegetation as required by Section 161. Compliance with all applicable toxic air pollutant carcinogenic increments and toxic air pollutant non-carcinogenic increments will also demonstrate preconstruction compliance with Section 161 with regards to the pollutants listed in Sections 585 and 586.

Per Section 210, if the emissions increase associated with a new source or modification exceeds screening emission levels (ELs) of Idaho Air Rules Section 585 or 586, then the ambient impact of the emissions increase must be estimated. If ambient impacts are less than applicable Acceptable Ambient Concentrations (AACs) for non-carcinogens of Idaho Air Rules Section 585 and Acceptable Ambient Concentrations for Carcinogens (AACCs) of Idaho Air Rules Section 586, then compliance with TAP requirements has been demonstrated.

2.2 Background Concentrations

Background concentrations are used in the full NAAQS impact analyses to account for impacts from sources not explicitly modeled. Table 3 lists appropriate background concentrations for the location of the proposed facility. DEQ provided Geomatrix the background concentration values.

Background concentrations were revised for all areas of Idaho by DEQ in March 2003[1]. Background concentrations in areas where no monitoring data are available were based on monitoring data from areas with similar population density, meteorology, and emissions sources. Default rural/agricultural background concentrations were used for all criteria pollutants.

Table 3. BACKGROUND CONCENTRATIONS

Pollutant	**Averaging Period**	**Background Concentration ($\mu g/m^3$)[a]**
PM_{10}[b]	24-hour	73
	Annual	26
Carbon monoxide (CO)	1-hour	3,600
	8-hour	2,300
Sulfur dioxide (SO_2)	3-hour	34
	24-hour	26
	Annual	8
Nitrogen dioxide (NO_2)	Annual	17
Lead (Pb)	Quarterly	0.08

a. Micrograms per cubic meter

b. Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

3.0 Modeling Impact Assessment

3.1 Modeling Methodology

1 Hardy, Rick and Schilling, Kevin. *Background Concentrations for Use in New Source Review Dispersion Modeling*. Memorandum to Mary Anderson, March 14, 2003.

This section describes the modeling methods used by the applicant to demonstrate compliance with applicable air quality standards.

3.1.1 Overview of Analyses

Table 4 provides a brief description of parameters used in the submitted modeling analyses.

Table 4. MODELING PARAMETERS		
Parameter	**Description/Values**	**Documentation/Addition Description**
Model	AERMOD	AERMOD with the PRIME downwash algorithm, version 07026
Meteorological data	Idaho Falls	Idaho Falls surface data and upper air data from Boise
Terrain	Considered	Receptor, building, and emissions source elevations were determined using Digital Elevation Model (DEM) files
Building downwash	Considered	The building profile input program (BPIP) was used
Receptor Grid	Grid 1	25-meter spacing along the property boundary out to 500 meters
	Grid 2	100-meter spacing out to about 2,500 meters
	Grid 3	250-meter spacing out to about 5,000 meters

3.1.2 Modeling protocol and Methodology

The submitted air impact analyses were conducted by Geomatrix. A modeling protocol was submitted to DEQ prior to the application. Modeling was generally conducted using methods and data presented in the protocol and the *State of Idaho Air Quality Modeling Guideline*.

3.1.3 Model Selection

Idaho Air Rules Section 202.02 require that estimates of ambient concentrations be based on air quality models specified in 40 CFR 51, Appendix W (Guideline on Air Quality Models). The refined, steady state, multiple source, Gaussian dispersion model AERMOD was promulgated as the replacement model for ISCST3 in December 2005. EPA provided a 1-year transition period during which either ISCST3 or AERMOD could be used at the discretion of the permitting agency. AERMOD must be used for all air impact analyses, performed in support of air quality permitting, conducted after November 2006.

AERMOD retains the single straight line trajectory of ISCST3, but includes more advanced algorithms to assess turbulent mixing processes in the planetary boundary layer for both convective and stable stratified layers.

AERMOD offers the following improvements over ISCST3:

- Improved dispersion in the convective boundary layer and the stable boundary layer
- Improved plume rise and buoyancy calculations
- Improved treatment of terrain affects on dispersion
- New vertical profiles of wind, turbulence, and temperature

AERMOD was used in the submitted analyses and verification analyses conducted by DEQ.

3.1.4 Meteorological Data

Surface data from Idaho Falls and upper air data from Boise were processed through AERMET. AERMET is the meteorological data preprocessor for AERMOD. Surface data for 2000 through 2004 were obtained for the Idaho National Laboratory (INL) station in Idaho Falls, Idaho. Data from the INL station in Roberts, Idaho and the National Weather Service (NWS) station at Idaho Falls Fanning Field were used for periods where data from the INL Idaho Falls station were missing.

Surface roughness, albedo, and Bowen ratio were evaluated on a sector-by-sector basis using land-use determinations within three kilometers of the meteorological monitoring site. USGS 1992 National Land Cover land-use data, with a 30-meter grid size, was used to assign landuse types. The USGS data were processed by Geomatrix using utility programs accompanying the CALPUFF modeling system. The MAKEGEO program associated with CALPUFF was then used to calculate a weighted average surface roughness length, albedo, and Bowen ratio. The sector-specific weighted geometric average was used for surface roughness while the weighted arithmetic average was used for albedo and Bowen ratio.

A more detailed description of how meteorological data were processed by AERMET was provided in the submitted application. DEQ determined the data and methods used to generate model-ready meteorological data were appropriate and resulted in the most representative data reasonably available.

3.1.5 Terrain Effects

Terrain effects on dispersion were considered in the analyses. Receptor elevations and hill heights were obtained

by Geomatrix using AERMAP and Digital Elevation Model (DEM) 7.5-minute files.

3.1.6 Facility Layout

The facility layout used in the modeling analyses, including the ambient air boundary, buildings, and emissions units, were checked against the proposed layout provided in the application and aerial photographs of the site. The layout used in the model was sufficiently representative of the proposed site layout.

3.1.7 Building Downwash

Downwash effects potentially caused by structures at the facility were accounted for in the dispersion modeling analyses. The Building Profile Input Program (BPIP) was used to calculate direction-specific building dimensions and Good Engineering Practice (GEP) stack height information from building dimensions/configurations and emissions release parameters for AERMOD.

3.1.8 Ambient Air Boundary

Geomatrix used the facility's property boundary as the ambient air boundary. DEQ assumed reasonable measures will be taken by the facility to preclude public access to the property.

3.1.9 Receptor Network

Table 4 describes the receptor grid used in the submitted analyses. The receptor grid met the minimum recommendations specified in the *State of Idaho Air Quality Modeling Guideline*. DEQ determined the receptor grid was adequate to reasonably resolve maximum modeled concentrations.

3.2 Emission Rates

North American Foods emissions rates used in the modeling analyses were equal to or somewhat greater than those presented in other sections of the permit application or the DEQ Statement of Basis.

3.2.1 Criteria Pollutant Emissions Rates

Table 5 provides Geomatrix criteria pollutant emissions rates used in the modeling analyses for both long-term and short-term averaging periods. Emissions from the Belt Dryers (proctors) were modeled by evenly distributing total emissions from the dryers among the three individual dryers. This same approach was used for modeling emissions from the three flaker lines. DEQ performed a modeling analysis assuming all emissions from the Belt Dryers were emitted from the PROCT_1 stack, which is the stack closest to the maximum PM_{10} 24-hour impact location. DEQ also modeled all Flaker Line emissions from FLAKE3, which is the stack closest to the maximum PM_{10} 24-hour impact location, for the same modeling analysis. This was done because the application requested that only a single emissions/operational limit be specified for the Belt Dryers and the Flaker Lines.

Table 5. EMISSIONS RATES USED FOR FULL NAAQS IMPACT MODELING

Emissions Point	Description	Emissions Rates (lb/hr)			
		PM_{10}[a]	Carbon Monoxide	Sulfur Dioxide	Oxides of Nitrogen
BLR_1	Boiler 1	5.1[b] 1.25[c]	10.35	31.9[b] 21.4[c]	12.1
BLR_2	Boiler 2	0.406	4.49	0.016	4.01
PROCT_1	Belt dryer 1 (Proctor 1)	0.825 2.475[d]			
PROCT_2	Belt dryer 2 (Proctor 2)	0.825 0.0[d]			
PROCT_3	Belt dryer 3 (Proctor 3)	0.825 0.0[d]			
FLAKE1	Flaker line 1	1.963 0.0[d]			
FLAKE2	Flaker line 2	1.963 0.0[d]			
FLAKE3	Flaker line 3	1.963 5.889[d]			
FL_1&2	Flaker lines 1 & 2 vaculift	0.166			
FL_3	Flaker line 3 vaculift	0.144			
BR_VAC	Bagroom dust vaculift	0.0801			
CL_VAC	Canline vaculift	0.0656			
PLANT1	Misc[e]	0.0825	0.913	0.00326	0.815
PLANT2	Misc[e]	0.0825	0.913	0.00326	0.815
PLANT3	Misc[e]	0.0825	0.913	0.00326	0.815

[a.] Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers
[b.] Short term emissions rate
[c.] Annual average emissions rate
[d.] Used by DEQ to demonstrate that compliance with the 24-hour PM_{10} standard will be met if all emissions of the equipment type listed are emitted from a single stack.
[e.] Building air vents the exhaust emissions from Bin Dryers 1 and 2, the Waste Plant AMU, the Flaker Room AMU, and the Bag Room AMU

3.2.2 TAP Emissions Rates

There are no increases in TAP emissions associated with the application.

3.3 Emission Release Parameters

Table 6 provides emissions release parameters for the submitted analyses including stack height, stack diameter, exhaust temperature, and exhaust velocity. DEQ staff were suspect of flow rates provided for the flaker stacks, especially since no supporting documentation were provided to justify the values used. A July 17, 2003, source test of Flaker Line 3 indicated a flow velocity of 40.0 feet per second (12.2 meters per second). DEQ performed additional impact analyses using the alternate flow rate to evaluate the model sensitivity to changes in flow rates of the flaker stacks. Subsequent discussion with Geomatrix verified that the 39.7 meter per second stack velocity was incorrect, and the correct velocity was 12.1 meters per second.

Table 6. EMISSIONS RELEASE PARAMETERS					
Release Point /Location	*Source Type*	*Stack Height (m)*[a]	*Modeled Diameter (m)*	*Stack Gas Temp. (K)*[b]	*Stack Gas Flow Velocity (m/sec)*[c]
Point Sources					
BLR_1	Point	11.9	1.04	472	8.44
BLR_2	Point	11.9	0.79	472	5.7
PROCT_1	Point	8.53	0.001[d]	355	0.001[d]
PROCT_2	Point	8.53	0.001[d]	355	0.001[d]
PROCT_3	Point	8.53	0.001[d]	355	0.001[d]
FLAKE1	Point	10.06	1.14	316	39.7 12.2[e]
FLAKE2	Point	10.36	1.14	316	39.7 12.2[e]
FLAKE3	Point	10.36	1.14	316	35.9 12.2[e]
FL_1&2	Point	9.14	0.001[d]	316	0.001[d]
FL_3	Point	9.14	0.001[d]	316	0.001[d]
BR_VAC	Point	9.14	0.001[d]	316	0.001[d]
CL_VAC	Point	8.53	0.001[d]	0.0	0.001[d]
PLANT1	Point	8.53	0.001[d]	314	0.001[d]
PLANT2	Point	8.53	0.001[d]	314	0.001[d]
PLANT3		8.53	0.001[d]	314	0.001[d]

[a]Meters
[b]Kelvin
[c]Meters per second
[d]Set at 0.001 to account for a horizontal release
[e]Value indicated in July 17, 2003, source test and value used in a DEQ sensitivity analysis

3.4 Results for Significant and Full Impact Analyses

Significant impact analyses were not performed; rather, the applicant proceeded directly to full NAAQS impact analyses. Results of the full NAAQS impact analyses are shown in Table 7. DEQ independent analyses demonstrated that compliance with NAAQS will be assured even if all emissions from proctors occur from a single stack and all emissions from flaker stacks occur from a single stack. DEQ analyses also demonstrated that compliance with NAAQS will still be assured if actual flow rates given for the flaker stacks, as suggested by previous source test results of the sources, are substantially lower than those used in the submitted analyses. Geomatrix also reran the modeling analyses with corrected flow rates and submitted results to DEQ; however, the modeling input and output files for these analyses were not submitted to DEQ.

A combined throughput or emissions limit can be used for both the proctor stacks and flaker stacks because the results from the DEQ analyses indicate compliance can be assured even if all emissions occur from a single stack for the proctors and a single stack for the flakers.

Table 7. RESULTS FOR FULL IMPACT ANALYSES						
Pollutant	**Averaging Period**	**Maximum Modeled Concentration ($\mu g/m^3$)[a]**	**Background Concentration ($\mu g/m^3$)**	**Total Ambient Impact ($\mu g/m^3$)**	**NAAQS[b] ($\mu g/m^3$)**	**Percent of NAAQS**
PM_{10}[c]	24-hour[d]	49 54[e] (48.0) (51.6[f])(56.6[g])	73	122 127[e] (121.0) (124.6[f])(129.6[g])	150	<86
	Annual	12 15[e]	26	38 41[e]	50	<82
Carbon monoxide (CO)	1-hour	901	3,600	4,501	40,000	11
	8-hour	194	2,300	2,494	10,000	25
Sulfur dioxide (SO_2)	3-hour	484	34	518	1,300[k]	40
	24-hour	81	26	107	365[k]	29
	Annual	15	8	23	80[g]	29
Nitrogen dioxide (NO_2)	Annual	13	17	30	100[g]	30

[a]Micrograms per cubic meter. Vales in parentheses are those generated through DEQ verification analyses
[b]National ambient air quality standards
[c]Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
[d]Modeled design values are the maximum 6th highest modeled value from a 5-year meteorological data set
[e]Result obtained using corrected flows for FLAKE1, FLAKE2, and FLAKE3
[f]Total emissions from PROCT_1, PROCT_2, and PROCT_3 modeled from PROCT_1, and total emissions from FLAKE1, FLAKE2, and FLAKE3 modeled from FLAKE3
[g]Emissions modeled as described in footnote "e," but flows from FLAKE3 were modeled at a corrected rate of 12.2 m/sec

3.5 Results for TAPs Analyses

Ambient TAPs analyses were not required for this permitting action.

4.0 Conclusions

The ambient air impact analyses demonstrated to DEQ's satisfaction that emissions from the facility will not cause or significantly contribute to a violation of any air quality standard.

APPENDIX D – Consent Order

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF

Idaho Fresh-Pak, Inc. dba Idahoan Foods 6140 West River Road Idaho Falls, Idaho 83402	**CONSENT ORDER** Idaho Code § 39-108

1. Pursuant to Idaho Environmental Protection and Health Act (EPHA), Idaho Code § 39-108 the Idaho Department of Environmental Quality (Department) enters into this Consent Order with Idaho Fresh-Pak, Inc. dba Idahoan Foods (Idahoan Foods) located in Idaho Falls, Bonneville County, Idaho.

2. Idahoan Foods, an Idaho corporation, owns and operates a potato dehydration facility in Idaho Falls, Idaho, an air pollution source regulated under the EPHA and the *Rules for the Control of Air Pollution in Idaho* (*Rules*), IDAPA 58.01.01.001 through 999.

3. On March 11 and April 25, 2002, the Department conducted inspections of the Idahoan Foods facility. Information obtained through the inspections and otherwise available to the Department revealed apparent violations of the *Rules*.

4. By Notice of Violation (NOV) dated September 20, 2002, the Department notified Idahoan Foods of these violations. The Department provided Idahoan Foods with the opportunity for a compliance conference to discuss correction of the violations and entry into a Consent Order with the Department. The NOV is incorporated into the Consent Order by reference.

5. On October 10, 2002, the compliance conference was held. Idahoan Foods responded to each alleged violation cited and presented actions taken or proposed to achieve compliance.

6. In order to resolve this matter without litigation or further controversy, Idahoan Foods agrees to the provisions of this Consent Order and the following terms and actions:

TIER II – PERMIT TO CONSTRUCT (PTC) PERMIT

7. In order to resolve Violation No. 1, Idahoan Foods agrees to submit a complete permit application for a facility-wide Tier II operating permit within 120 days of the effective date of this Consent Order. The application shall comply with the applicable requirements for Tier II operating permits set forth in IDAPA 58.01.01.400 through 470.

8. In addition to the requirements for Tier II operating permits, the application shall include all of the applicable information and comply with the applicable requirements for Permits to Construct (PTCs) as set forth in IDAPA 58.01.01.200 through 223 for the construction and/or modification of any air pollution sources for which Idahoan Foods was required to, but did not obtain a PTC.

9. Upon receipt of a complete application, the Department will draft a single proposed Tier II/PTC operating permit for the facility. The permit will contain all of the terms and conditions necessary to comply with the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 and the requirements for Tier II operating permits in accordance with IDAPA 58.01.01.400 through 470. The permit will clearly identify the origin and basis for each term and condition. The procedures for issuing a PTC under IDAPA 58.01.01.209 shall be followed concurrently with the procedures for issuing a Tier II operating permit under IDAPA 58.01.01.404.

VISIBLE EMISSIONS EVALUATION

10. In order to resolve Violation No. 2, within 30 days of the effective date of this Consent Order and until such time as the Tier II/PTC operating permit is issued, Idahoan Foods shall conduct a monthly, facility-wide inspection of potential sources of visible emissions at the Idaho Falls facility during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no-see evaluation for each potential source. If any visible emissions are present from any point of emission, Idahoan Foods shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A trained and certified opacity observer shall perform the opacity test. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in a 60-minute period, Idahoan Foods shall report the exceedance to the Department's Idaho Falls Regional Office and take all necessary corrective action within twenty-four hours of discovery. Idahoan Foods shall maintain a record of the results of each monthly visible emission inspection and each opacity test when conducted. The record shall include, at a minimum: the name and signature of the opacity observer, a description of the emission source evaluated, the date, time and results of each inspection and test, a description of the observer's assessment of the conditions existing at the time visible emissions are present (approximate wind speed and direction, sky conditions and temperature) any corrective action taken in response to the visible emissions, and the date corrective action was taken. Upon issuance of the final Tier II/PTC operating permit, Idahoan Foods shall conduct visible emission inspections pursuant to the terms and conditions of the permit.

11. PENALTY – Idahoan Foods shall pay to the Department the civil penalty of $15,250 dollars for the alleged violations. Payment shall be made within 15 days of the effective date of this Consent Order.

12. Payment shall be made by check payable to the Idaho Department of Environmental Quality. Please send the penalty payment to the following address:

Accounts Receivable – Fiscal Office
Air Quality Penalty Payment
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255

13. All correspondence sent by Idahoan Foods to the Department shall be addressed to:

Rensay Owen, Air Quality Regional Manager
Idaho Falls Regional Office
Department of Environmental Quality
900 N. Skyline, Suite B
Idaho Falls, ID 83402

14. All correspondence sent by the Department to Idahoan Foods shall be addressed to:

Todd Scott, Plant Engineer
Idahoan Foods
P.O. Box 130
Lewisville, Idaho 83431

15. This Consent Order shall not relieve Idahoan Foods from its obligation to comply with any of the provisions of the EPHA, the *Rules*, any provisions of an air quality permit issued by the Department to Idahoan Foods, or other applicable local, state, or federal laws and regulations

16. This Consent Order shall bind Idahoan Foods, its successors and assigns until such time as the terms of the Consent Order are met and the Department terminates the Consent Order in writing.

17. Idahoan Foods expressly recognizes that failure to comply with the terms of this Consent Order may result in a district court action for specific performance of the Consent Order, civil penalties, assessment of costs, restraining orders, injunctions and other relief available under law.

18. If any event occurs that causes, or may cause, delay in the achievement of any requirement of this Consent Order, Idahoan Foods shall notify the Department in writing within ten days of the date Idahoan Foods knew, or should have known, of the delay. Any notice under this paragraph shall describe in detail the anticipated length of the delay, all anticipated consequences of the delay, measures taken by Idahoan Foods to prevent or minimize the delay, and a timetable by which those measures shall be implemented. Idahoan Foods shall take all reasonable measures to avoid or minimize any such delay. If the Department determines that the delay or anticipated delay in achieving any requirement of this Consent Order has been or will be cause by circumstances beyond the reasonable control of Idahoan Foods, the Department may grant an extension for a period equal to the length of the delay. The burden of proving that any delay is caused by circumstances beyond the reasonable control of Idahoan Foods shall rest wholly with Idahoan Foods.

19. The effective date of this Consent Order shall be the date of the signature by the Director of the Idaho Department of Environmental Quality.

DATED THIS 11 **day of** December, **2002**

Brad Bowen, Environmental Vice-President
Idahoan Foods

DATED THIS 24th **day of** December, **2002**

C. Stephen Allred, Director
Idaho Department of Environmental Quality